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A PAPER
ON
THE HISTORY AND STATISTICS
OF
ASIATIC CHOLERA,
IN JERSEY.

WITH
CURSORY REMARKS
ON SOME OF THE MOST PROMINENT MEASURES
OF THE
Central Board of Health,
OF THAT ISLAND.

BY
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P R E F A C E.



THE Author of the following paper does not send it forth with any view to literary fame. On the contrary, it is with no little reluctance that he ventures to appear before the public, although he cannot divest himself entirely of the hope, that the bare and unvarnished statement of facts, which he has been enabled to give, relative to the history of Asiatic Cholera, in Jersey, may be at least interesting, if not decidedly useful, to many of his readers. He wishes it, however, to be clearly understood—as, indeed, he conceives it himself—that the Central Board of Health, in ordering the publication of a certain number of copies of the work, did not intend to bestow the weight of its own authority upon mere matter of opinion, or inference; but only to pass on the performance, in its *ensemble*, a general compliment, of the value of which he, as the Author, cannot be otherwise than deeply sensible.

A PAPER,

&c. &c.

It may not be unnecessary to observe that the main objects of the following remarks are—1st. to invite attention to the circumstances which, in this island, seemed to favor the development of Asiatic Cholera, and add to its virulency when once developed; and 2dly. to show by a retrospect of the late epidemy, that, in preparing for its visitation, we failed rather in spirit and perseverance, than in the means of prevention. In considering proposed measures of precaution, whilst a calamity is as yet only in perspective, and while a possibility still remains of our not having to encounter it at all, we are too frequently apt to be influenced by the inconveniences attendant upon their adoption, and they are, consequently, easily abandoned or postponed. That we have felt most severely the ill effects of such procras-

tination, in the frightful extent of the recent calamity, can scarcely be doubted by any unprejudiced mind; however, should further evidence be required on that painfully interesting subject, the summary of facts which follows may not be altogether without its utility. Whether or not the Cholera, like other epidemical diseases, be destined to repeat itself at intervals in this and other parts of the earth, I will not stop to examine; but, whichever way the question may be decided by the event, it is certain that the most rational direction we can give to our meditations on the subject, at present, is to discover the relations which exist between the various circumstances of its history, and to convert such knowledge into rules of conduct in case of its reappearance. It was in that spirit that I imposed upon myself the duty of committing to paper such thoughts as occurred to me, whilst actively engaged in combating the direful malady, during its prevalence in the island; and that, subsequently, in calmer moments, I entered into a fuller consideration of the matter, with a view to useful deductions. For the reward of my study and researches, I look to the possibility of their being of some advantage to my countrymen, and my fellow-creatures generally. Need I add, that in any observations which I may feel called upon to make in this paper, I shall be ac-

tuated by no other feeling than a sincere desire of contributing my humble efforts, towards rendering available to ourselves, and posterity, the dearly purchased experience we have acquired? Nothing, indeed, could be more foreign to my intentions than to reflect upon the conduct of any set of persons,—much less of the Central Board of Health, in whose service I had the honor to be, and than which no similar body ever displayed more zeal for the public good, or more persevering industry in the discharge of its arduous functions.

ORIGIN OF THE DISEASE.

1. *Circumstances of a local nature which assisted its development.*—It would be erroneous to imagine that the breaking out of Cholera, in this island, was really as sudden as the general alarm, which attended the announcement of the first cases, which exhibited the disease in its most unequivocal form. For several weeks before the actual presence of the epidemic, there had been a very remarkable prevalence of bowel complaints, of an irregular nature, in regard as well to the order and severity of symptoms, as to their effects upon the general health of such individuals as laboured under them ;—a fact which had so particularly attracted the notice of professional observers, that many were heard to argue from it, that the

much dreaded pestilence would, ere long, extend itself to our shores. Thus it would appear, that the general scourge had for some time been slowly and insidiously preparing its reign of terror, by undermining, as it were, the resistance it might have met with in constitutions not previously tainted by its deleterious influence. Apprehensions like these were not, however, very widely entertained by the public. On the contrary, although at an early period of the existence of the malady in the south of England, we naturally began to fear for ourselves, still a further immunity from its dreadful ravages gave an air of plausibility to the notion of many persons, who believed, and confidently asserted, that our insular situation would most likely exempt us from it altogether. Some traditional records touching the state of public health in this and the sister islands, during the prevalence of other epidemics in the neighbouring countries, were not a little calculated to strengthen an opinion so consonant with the hopes of all. Nevertheless, more rigid thinkers, who felt on how weak a foundation that feeling of security rested, were, all along, sensibly alive to the direful visitation that awaited our community, should the disease once shew itself amongst us; and it was accordingly admitted by all competent persons, that should our favorable locality not

protect us, the character of the disorder would probably be of the most malignant kind, and its ravages proportionably extensive. I shall now proceed to point out on what grounds that more rational view of the case was taken.

Concerning the *proximate* causes of Asiatic Cholera, human investigation has, as yet, taught us nothing:—absolutely nothing. Some people talk of miasms, others of contagious principles, and many of both;—but what good do we derive from their learned disputations,—unless it be, the wholesome, though humiliating conviction, that the mysterious problem is too difficult for human ingenuity to cope with? It is otherwise, however, respecting the *predisposing* and *exciting* causes, upon the nature of which, learning, nay common observation, throws considerable light. For example, it is clearly established that air, vitiated by the emanations of stagnant drains, putrid matter, or low marshy soils—drunkenness, exhaustion, from hard labour, or other causes,—bad or insufficient nourishment—fear, and filth of every description—are always predisposing, and frequently exciting, causes of the disease, when it rages epidemically. That there are other circumstances capable of occasioning similar effects, cannot be doubted—since we meet with cases, in which none of those mentioned seem to have operated;

but it is equally true, that the latter hold the first rank, and are the most general ; and that, were our prudence employed in counteracting these, by every means in our power, previously to the actual breaking-out of the epidemy, much would be done to limit the extent of its ravages.

It would be somewhat difficult to find a place, where, in proportion to its magnitude, intemperance had more votaries, or, where poverty, demoralization, and squalid misery prevailed in a greater degree, than in this otherwise happy island. That disgraceful peculiarity does not, it is true, belong to the indigenous population of this island, the poor of which are liberally provided for, and are, comparatively speaking, a very decent set of people. It is, in fact, almost exclusively chargeable to the constant influx of labouring men, and disabled pensioners, from England and Ireland, whose habits, however sober they may be on their arrival, too often become contaminated by pernicious example, joined to the increased opportunities, which low prices offer them for the abuse of ardent spirits. I allude, therefore, principally to the very great number of persons of that description, resident here, who, with their families, depend upon the precarious support, which flows from scanty means, and insufficient employment, and which is besides greatly con-

tracted by the ruinous propensity to intemperance, almost universal among that class. No stronger illustration of that superabundance of extraneous pauperism could possibly be given, than the abortiveness of the existing law, when the late calamity seemed to call for its most rigid application. Those unfortunate beings, as might have been expected, became the first and principal victims of Cholera, and, as it were, the vehicles by which the fatal disease was disseminated through the town and country: consequently, it was thought advisable to check that means of propagation, by urging the police to employ such powers, as it was invested with by law, towards the attainment of the important object in view. In furtherance of this, a close and rigid inquisition was commenced into the resources of all individuals falling under the above denomination, with the intention of sending to their natural homes those who had no birth right to parochial relief in this island, unless they were able to offer some security that their means of livelihood and industry would shelter them from want, and consequent liability to infection. The amount of security was first fixed at £7, and afterwards reduced to £5. So decisive and comprehensive a measure, though susceptible of very harsh interpretation, and open to much obloquy in certain respects,

must, nevertheless, appear justifiable, or at least excusable, on the score of the motive, which suggested it; and the clamourous indignation it created in some quarters, on its being resorted to, at a moment, when, it was urged, the better feelings of our nature ought to have prevailed, only shows by how much perspective are preferable to retrospective measures, in questions affecting personal liberty. The indiscriminate application of the law, however, threatened to involve the ejectment of so numerous a class of individuals,—with many of whom the case would have been one of extreme hardship,—that the Chief of police very wisely abandoned the original measure, and restricted its operation to those only, who were absolutely destitute, and actually chargeable to the island. Could a more convincing proof be furnished of the objectionable state of our population, at the time of the breaking-out of Cholera?

In addition to the foregoing cause of predisposition in the constitution of our community, another, still more general, existed in the localities of the town itself, which conspired very powerfully, to render us peculiarly obnoxious to the ravages of the disease. With the exception of that lesser part, called the upper-town, which, by its superior elevation drains itself into the lower and more extensive portion, the town of St. Helier's may be

said to be flat, and void of the necessary drainage. In the older, and most thickly inhabited streets, the houses are, for the most part, provided with ill contrived gutters, running under the ground-floor, and through which all foul waters are freely discharged into the public way, or some adjoining ground, where they are allowed to stagnate, until evaporated by the action of the air. Other nuisances no less objectionable at all times, but more particularly in sickly seasons, abound both in and out of doors, from the same want of proper sewers; besides which, there are, here and there, portions of brooks, open to receive every species of filth, and, consequently, when their currents are low, impregnating the neighbourhood with the most noxious and unwholesome effluvia. Reasoning from what would be the infallible consequences of a similar state of things, in an inland town, it would be difficult to conceive, how it had been allowed so long to coexist with the degree of civilization and refinement, which a constant and intimate intercourse with the mother-country has naturally introduced into this island. It may also appear somewhat singular to a stranger, that the vicinity of those brooks was formerly, and, indeed, till very lately, considered as an enhancement of property; and that houses were built over them, with apparently little regard to the salubrity of

the situation. This arose out of the absence of public sewers, the useful purposes of which they in part answered. And, indeed, while the extent of the town was yet inconsiderable, and the population small—and while the streams were freely exposed to the sea breeze, by being open in their course through the town—the unpleasant and dangerous effects, which now call for their speedy abolition, could not be so keenly felt. During the summer months, they are almost entirely stagnant; the influx of filth into them suffers no diminution; whilst, on the other hand, little or nothing is carried off, the current of water being reduced to its lowest ebb, and so insignificant, as to lose all its power of propulsion. What, then, must have been the horrible condition of those brooks, after a drought such as immediately preceded the development of Cholera! In Hilgrove-lane, especially, the stench was intolerable, and, if, in other parts, the object did not so readily offend the eye, it was no less perceptible to the smell. The danger attendant upon the continuance of such nuisances, could not fail to strike the most thoughtless, at a time, when the near approach of the pestilence to our shores had become the all engrossing subject of conversation. The subject was accordingly submitted to a medical committee, appointed by the Central Board of Health, from whose minutes

of the 8th of November, 1831, the following is extracted *verbatim* :—“ Another source of mischief
 “ the Committee beg leave to point out is the insufficiency of the drains, constituting so many
 “ offensive channels of communication from house
 “ to house, generally open, or but slightly covered,
 “ accompanied with many branches containing
 “ matters highly charged with elements noxious
 “ to health. To remedy this evil a new system of
 “ drainage appears to be imperatively called for.
 “ It has been suggested to the Committee by Mr.
 “ Saunders, (who seems to be well acquainted
 “ with the localities of Saint Helier’s), that these
 “ evils might be remedied by the construction of
 “ a new drain from the beach through Conway-
 “ street, across Broad-street and King-street,
 “ through New-street and Burrard-street, to the
 “ meadows behind the town.” This is in fact the
 drain which is now in progress.* It affords matter,

* Having this opportunity of diffusing pretty generally a knowledge of the utility of the main-sewer, now in progress of construction, I became anxious to obtain every information, relative to its capability of draining the whole of that part of the town, which stands most in need of such an outlet. With that view, I addressed a few queries to my ingenious and talented friend, Mr. W. Saunders, whose plan and suggestions have so materially assisted the projectors of that great undertaking. To my inquiry, that gentleman has returned the following answer, which, as it might lose much of its perspicuity by any attempt at abridgment, I have preferred laying before my readers in the writer’s own words.

“ January 3rd 1833.

“ MY DEAR SIR,

“ The following statement will, I think, present the facts you desire. I would have referred you to the report I made upon this subject to the Committee of the Board of Health, in the month of October, 1831; but as

however, for much painful reflection, that an undertaking, so fertile in palpable advantages, was only commenced, after the evils it was intended to remove had displayed their fatal effects upon our population, in favoring the irruption, and adding

that report was not grounded upon an actual survey, and as Mr. Peckston has kindly furnished me with data, from the survey he made preparatory to the works now in progress, I shall avail myself of them in preference, and restate my views as to the drainage of the Town.

“ It appears from Mr. Peckston’s levels, that the fall of surface, from the East end of Providence-street to the bottom of Conway-street, is about 2 feet 9 inches. The length of the brook from one of these stations to the other, is above 4,000 feet. The fall, therefore, is about 8 inches per 1000 feet, and I believe all the other brooks are very similarly circumstanced.

“ This very near approach to a dead level is the principal cause of the insufficiency of the present brooks as channels of escape for the mere surface water. As sewers, they are even more defective, in consequence of their extreme shallowness ; the immediate consequence of which is a very imperfect covering, which admits the freest escape of unwholesome effluvia into the streets and houses above. Another inconvenience arising from the same cause must also be very apparent, namely, the unsafe state of those streets through which the brooks run and are covered by flat stones, upon which horses are constantly falling. Deep or under drainage is of course quite out of the question, as these brooks cannot draw more than about two feet in depth from the surface, and if the top soil of the town valley had been of a water-tight quality, it must have been long ago uninhabitable ; but as it happens to be chiefly sand, percolation to the sea takes place so as to depress the level of stagnant water to an average of four feet below the surface, a depth not nearly enough to prevent unwholesome dampness in the ground floors of most houses, or to admit of sunk stories, a convenience of the first importance to a trading town. This stagnant water is so generally diffused, that most wells are contaminated by it ; a fact sufficiently evident since the wells about the finished portion of the new cut, are either dry or much depressed. Such is the present state of this town as to drainage.

“ The remedy, the first step to which is now being taken, I shall endeavour to shew, is susceptible of a near approach to perfection.

“ The new drain commences at the lowest portion of the beach, and proceeds nearly through the centre of the town in a right line ; it then alters its course by a right angle, and proceeds to the existing brook, at the head of Providence-street. Its length will be 2,400 feet, at such an inclination as shall give a fall of 11 feet 4 inches, or about $5\frac{1}{4}$ inches for each 100 feet ; an angle seven times greater than that of the existing brooks. Its capacity is such as to discharge about 28 tons of water per minute, when the stream shall be 12 inches in depth. It will be evident, that this drain is in no danger of a surcharge, and of course a rain-flood cannot happen, when it shall have been completed. It is, however, as a common sewer, or grand trunk into which all other drains shall discharge themselves, that its principal utility will be manifested, and its fitness for that purpose must be

to the inveteracy, of the recent epidemy. Here the blind feeling of security I have already alluded to must have operated : for, had our authorities, and the public, been made certain of the impending visitation, nothing could have been more obvious to their understandings, than the necessity of improving the drainage of the town, preparatory to any other measures of protection against the scourge. Is it too much to say, that, in all probability, if the above valuable suggestion had been taken up at once, and the work begun forthwith, a moderate degree of public spirit and activity would have sufficed for the effectual drainage, in a

tested by its depression below every other point in connection with it. The amount of that depression below the surface, in feet and inches, at several points along its course, are noted by Mr. Peckston as follows :

| | | |
|-----------------------------------|----|----|
| Bottom of Conway-street..... | 15 | 7½ |
| Mr. Anthoine's corner..... | 15 | 1½ |
| Corner King-street (Cabot's)..... | 14 | 9 |
| Fauxbié in New-street..... | 14 | 8 |
| Guiton's corner do..... | 12 | 3 |
| Don-street..... | 11 | 5 |
| Halkett-Place..... | 10 | 10 |
| Cattle-street..... | 10 | 2 |
| Bath-street..... | 9 | 2 |
| Providence-street..... | 8 | 0 |
| Junction with the Fauxbié..... | 7 | 3 |

“ This depression will be sufficient to give a fall equal to that of the drain itself, to every tributary which may be brought to it ; and I have no doubt, that in the course of a few years, every street and lane will have its sewer, and every house its well trapped drain. We shall then be free from damp and stench—we shall have clean and safe streets, and proprietors will add another floor to their houses, in a perfectly dry soil—the present channels of pestilence will disappear, and future epidemics will not fall upon us, as upon a people who blindly repose with all the elements of disease about them.

“ Ever, my dear Sir,

“ Most truly your's,

“ W^M. SAUNDERS.”

few months, of the marsh, upon which the principal portion of St. Helier's is erected ? and might not the awful disease have thus been, if not entirely averted, at least considerably mitigated in its effects ? It is, indeed, some consolation to observe, that the hard lesson has not been unprofitable, and that the well-wisher of this delightful island may hope to see its town, at no distant period, as completely ridden of its present nuisances, as it is possible for human ingenuity to make it.

I believe that enough has now been laid before the reader to convince him, that the unhappy distinction Jersey has acquired, by the extraordinary severity, with which Asiatic Cholera lately visited it, is fully accounted for by the many elements of predisposition it contained within itself.

2. *Contagion*.—It does not appear from any fact that has come to my knowledge, that the primitive appearance of Asiatic Cholera, in this island, is referrible to its introduction by contagion. I think that those of my professional brethren, who enjoyed the most extensive opportunities of observing the march of the disease, will bear me out in the opinion, that some cases, which occurred during the epidemy, savoured strongly of a contagious origin ; but that such cases were too few in number, to authorize the conclusion, that the pro-

pagation of the complaint was very materially assisted by that cause. That no communication or intercourse had existed between the three first individuals, who were attacked with it, I have taken some pains to ascertain; neither does the rumour which was set afloat, at the beginning of the epidemic,—viz. that John Philips, whose case was among the earliest, had furnished himself with a suit of clothes, at the shop of a man lately come from Plymouth with an assortment of second-hand wearing-apparel,—seem to rest on any well-authenticated fact. It may be well for me to state, that had I viewed those first cases through the medium of any preconceived notions, the bias of my mind would probably have inclined me to catch at any circumstance in their history, from which a contagious agency might fairly have been inferred. From actual observation, however, I am inclined to think, that the contagiousness of Cholera is established upon comparatively few facts, and, consequently, that it forms one of the least striking characteristics of the disease. And, indeed, such facts are so frequently mixed up with superior liability and predisposition in the individual, that they might be ascribed, with perhaps equal reason, to epidemical influence alone. So that, although I should not think myself justified in rejecting entirely the doctrine of contagion,

nevertheless, I cannot help thinking that, were the malady left to that mode of propagation only, its ravages would be infinitely limited : since, at the expiration of the epidemy, or, in other words, on the withdrawal of the epidemical influence, we see a place pass suddenly into a state of health, and the disease disappear with the most surprising rapidity.

Under this head, it may be expected that some notice should be taken of the state of health in our General Hospital, during the prevalence of the epidemy in its neighbourhood. This public institution,—which, from the nature of its charity, would be more properly designated a poor-house,—might, undoubtedly, have admitted of the nearest approach to complete isolation ; and, had any measures to that effect been adopted by its Committee of Management, it is probable that the result would have been interesting, in regard to the modes in which Cholera was propagated in this island. But it does not appear, from the information which I have been able to collect, that any direct attempt was made, either at the commencement, or at the height of the epidemy, to intercept the usual communications with the town ; save, perhaps, the very insecure precaution of submitting all *sick* paupers to a medical examination, previously to their being admitted. The

number of paupers constantly within the walls of the establishment, may be averaged at about 150, out of which, from 12 to 15, occupy the sick-wards. Admissions for illness only being comparatively of rare occurrence, and the house being chiefly used as a retreat for the aged and helpless poor, or as a place of confinement for the depraved and the dissolute, it follows, that, under ordinary circumstances, the number of sick cannot, at any time, be very great. Here, however, as in the island generally, an extraordinary prevalence of bowel complaints was noticed some time before the malignant disease declared itself: so much so, indeed, that diarrhea may be said to have rapidly run through the house, and to have visited almost every one of its inhabitants. The number of sick became, of a sudden, nearly doubled in the medical wards; and,—what appeared very remarkable,—the indispositions and diseases were almost exclusively intestinal. So much did this occurrence excite attention, that a modification was introduced into the habitual diet of the house, under the directions of the Surgeon. It is also worthy of notice, that this observation was made at the same period that a similar state of things obtained in town; and that phenomenon ought certainly to be considered not merely as a coincidence, but rather as a proof, that our hospital was subjected

to the same general causes of disease, which operated without its walls. If then epidemical agency be sufficient to account for the very great majority of cases of Cholera furnished by the island, the same principle will hold, in regard to those which appeared in the General Hospital.

Notwithstanding that the danger of an introduction of Cholera, by contagion, into the institution I am speaking of, does not seem to have been much dreaded by its guardians, still there is no fact, that I have become acquainted with, which would seem to imply, that the breaking-out of the malady among its inmates was referrible to any other cause than one of an epidemical nature. This I do not state unadvisedly ; for, through the kindness and attention of Mr. Sullivan, the Administrator, and Doctor Charles Jones, the Surgeon, the most ample and satisfactory means of investigation have constantly been afforded me on this, as well as other matters. On the 16th of August, eight days subsequent to the full development of the pestilence in the island, a case shewed itself in the General Hospital, in the person of an *old* inmate of the charity ; which case was quickly succeeded by four others, also of a very decided character, and in persons similarly circumstanced. Of these five first cases,—which were immediately transferred to the *Cholera Hos-*

pital, so soon as they had been recognized,—three died. It was not before the 24th of the same month, that J. Lambert, a boy 12 years of age, admitted on the 18th, suffered an attack, under which he rapidly sunk. At this time, the disease had begun to rage with fatal violence in the surrounding districts, viz. Nos. five and six, which, as will be presently shewn, were those, over which the scourge exercised its most formidable ravages. The disease continued in the establishment exactly twenty-five days, during which lapse of time, 22 individuals were attacked, which is a little less than one a day, on a general average. Of these, only five had been recently admitted. So small a proportion as one case per diem, on 150 persons, would scarcely induce us, in this instance, to ascribe much to the instrumentality of a *very active* contagious principle: for, though many causes of predisposition, present elsewhere among the poor, were certainly wanting in this temple of charity, still it must be allowed, that there in reality existed many, originating in age, and constitutions deteriorated by former and, in many cases, recent excesses, or sufferings,—all which must have considerably promoted the spread of the malady, among the unfortunates in question. Such liability, from the causes stated, would equally assist the extension of a disease, whichever

way the latter might be principally disseminated ; but it may, I think, be justly argued, that, as regards the progress of Cholera in our hospital, the number of its victims falls short of what might be expected from the joint and simultaneous actions of epidemical and contagious causes. It is upon such reasoning, that I have formed the opinion, that without rejecting the few examples of Cholera which may, and perhaps *must* be attributed to contagion,* the comparative rarity of such cases,

* Two cases of that nature came under my own observation. The subject of the first was Miss Lihou, a respectable person, between thirty and forty years of age, keeping a lodging house in Old-street. A sail-maker, of the name of Wineey, had recently taken his meals with the family, during the absence of his wife, who was for a short time in Guernsey. He, however, slept at his own lodgings. On the 14th of August, he came as usual to his dinner, when, without having shewn any signs of previous indisposition, he was accidentally found in a room in the yard of the house, whither he had silently retired, labouring under the severest symptoms of the prevailing disorder. Living close-by, I came to him almost immediately ; but, so malignant was the attack, that I found him already quite prostrate, and evidently passing into the collapsed state. At my recommendation, he readily consented to go to the Cholera Hospital ; and as, for obvious reasons, it was desirable that the lodgers should know nothing of the matter, little time was taken up in his removal. Miss L. did not betray any excessive alarm as to the danger which such an event might bring upon the people of the house ; but, as she put me a question on the subject of preventives, it became my duty to give her some instructions, and to use every argument in my power to set her mind at ease in that respect. The appalling nature of the occurrence could not fail, however, to have a very powerful effect upon her feelings ; more especially as she had been the most active in attending upon the unfortunate man, so long as he remained in the house. In the night of the same day, she was seized with the malady, and expired in three or four hours. Wineey had also died in the hospital shortly after his admission. *No other case of cholera happened in or near the house, during the whole course of the epidemic.* Three weeks elapsed before another one appeared in the same street, and that was the last.

The second case was that of Mrs. Read. This unfortunate woman, 36 years of age, strong, well-conducted and easy in her circumstances, had, in the night of the 16th August, rendered humane assistance to some one of her acquaintance, who died of cholera. Wishing to relieve the survivors of some share of trouble, she had taken home with her some linen, which had been used by the deceased, with the intention of washing it. Whilst in the

when contrasted with the great multiplicity of others of a different origin, proves the promulgation of that pestilence to be little aided by such a cause. I entertain this opinion only in reference to places, where the malady is *actually developed*.

Touching the question of its primitive development,—whether it originates in a direct or indirect transmission from one locality to another, or in a mere maturation of local causes by an epidemical agent,—I do not feel so competent to speak, having only one observation to offer towards the elucidation of that important subject : viz. that, in Jersey, Asiatic Cholera broke-out without any circumstance having been satisfactorily ascertained, of a nature to authorize the conclusion, that the pestilential disease was imported from any other place by persons or things.

In Fort Regent, where every means was employed to prevent all dangerous intercourse with the town below, and where the strictest watch was kept over the garrison, numerous cases of diarrhœa occurred, several of which created doubt

act of doing this, on the 17th, she was suddenly attacked with the fatal malady, of which she died in five hours. She resided in a cottage facing the main entrance to the gas-works, and her's was the only case of cholera that appeared in the same quarter. It was one of the most malignant I ever witnessed, and was rendered peculiarly distressing by the shocking circumstance of her being almost absolutely forsaken by her friends, and left to breathe her last, with scarcely any other attendance than that which the medical man was enabled to bestow upon her.—Such revolting instances of barbarous selfishness were happily *very rare* in this island, during the late visitation.

and suspicion in the mind of my accomplished friend, Mr. Vowel, the Surgeon; but only one was reported to the Board as real Cholera, and that case had proved fatal. Mr. Vowel, however, who visited many of the victims of the disease in the town, and the Cholera Hospital, had repeatedly assured me of his conviction, that the pestilence was actually exercising its ravages among his men, under a mild form.

PROGRESS OF THE DISEASE.

It is worthy of remark, that, on the day immediately preceding the one on which the Cholera broke-out in this island, rain had fallen in profusion, after a drought of 52 days; during the whole of which protracted period, not more than two or three light showers had been seen. Now, this striking coincidence, if considered in conjunction with the prevalence of intestinal affections for some weeks previously, tends much to strengthen the opinion I have already advanced, touching the precise time, at which the epidemical influence began to manifest itself amongst us. For, if we suppose that influence to have been actually present, and only retarded in its full development by the absence of certain necessary conditions of the air, there will remain little diffi-

culty in accounting for the apparent relation of cause and effect, existing between the abundant fall of rain on the 5th of August, and the irruption of the awful disease on the following day. Without wishing to theorize, I conceive the *modus operandi* of the pestilential agent, be its essence what it may, to consist in imparting additional virulency, by an unknown process, to the causes of disease, which reside in air rendered impure by confinement, or by the deleterious emanations of marshy soils, loaded drains, and every species of accumulated filth, whether animal or vegetable. Admitting this, it will be readily conceded, that heavy rain, by stirring-up and moving such sources of miasm, will have suddenly aided the evolution of the latter, and, by that means, will have brought our atmosphere into the condition most congenial to the full operation of the proximate cause of the epidemic. Besides, we must recollect, that the effect of a long continuance of dry weather on stagnant pools, marshes, &c., is first to evaporate their water, and, afterwards, to coat them with a sort of superficial encrustation, locking-up and concentrating the noxious effluvia, which would otherwise ascend. On the occurrence of rain, these are, of a sudden, liberated; and as humidity is their natural vehicle, their action is rendered incomparably more intense. An idea somewhat

resembling this, had been put forth so early as October, 1831, by Mr. Barham, of Exeter, in a very clever contribution to the London Medical Gazette. After some apt reasoning, tending to show that epidemics are not diffused by a *general*, but rather by a *local* contamination of the atmosphere, that writer goes on to say:—" Putting, " for the present, the hypothesis of contagion " aside, I am at a loss to conceive of any probable " mode in which such a disease (the Cholera) can " be supposed to be propagated, except that of " a progressive contamination of the air itself, " creeping onwards with varying measures of " force and velocity, and in varying directions, " according to local circumstances, from place to " place. If asked on what principle I propose to " explain this progressive contamination, I should " answer, that it may be explained by supposing " some process to take place in the air analogous " to *fermentation*. I should not suppose such a " process to exist among the proper elements of " the air itself, but in *the stratum of animal and " vegetable effluvia*, which, though invisible, unquestionably exists in a state of solution or suspension, in the portion of the atmosphere which lies next the earth. And as these matters, in kind and concentration, must greatly differ in different spots, and therefore may be supposed

“ to present the requisite materials for the pecu-
 “ liar fermentative process in one place more than
 “ in another, we see a reason why the disease
 “ thence arising may be found taking an irregular
 “ and seemingly capricious route, and especially
 “ why it may manifest itself with deadly virulence
 “ in large and ill-conditioned towns, while it
 “ spares its neighbouring country. Moreover,
 “ the manner in which Cholera develops itself,
 “ generally attacking great numbers, and with
 “ fatal violence, almost at its first onset, and then
 “ declining and finally disappearing in a given
 “ place in a few weeks, seems well explained on
 “ this hypothesis, as a fermentative process would
 “ naturally proceed in this manner. Nor can I
 “ conceive in what other way the sudden transi-
 “ tion of a town from a state full of disease and
 “ death to one of health, while in the mean time
 “ a neighbouring town has experienced a change
 “ exactly the reverse, can be explained.” Al-
 though the author of the foregoing passage goes
 further than I would wish to venture, in attempting
 to explain the process, by which miasms receive
 the increased virulency, which enables them to
 occasion so fearful a disease as cholera; still, in
 principle, our views entirely coincide. I value
 this accidental accordance the more, as at the time
 that I read to the Board the report, which forms

the substance of this paper, I was not aware of the circumstance, and only reasoned from my own observation and reflection. Certainly, if theories are to be judged by their tendency, that which I have been attempting to develop, with the additional aid of the above perspicuous extract, merits a certain degree of favor ; inasmuch as, were it generally adopted, it would place in the strongest possible light the necessity and advantage of attending first and principally to the rules of cleanliness and salubrity, in guarding against an impending visitation of cholera.

Having, for some years past, been assiduously engaged in meteorological observations, with a view to ascertain the nature of our climate, so carelessly treated of by writers on the subject, it was natural for me to search the pages of my diary in quest of some anomalous state of our atmosphere, immediately before the breaking-out, and during the progress of cholera, in the island. My researches have not, however, repaid me any other way than by convincing me that, in regard to barometric and thermometric phenomena, our atmosphere presented no particular anomaly during the season in question.

On the 8th of August, there occurred in a woman named Murray, a malignant case of Asiatic Cholera, too convincing in its symptoms to admit

of a doubt, and which, consequently, settled the yet undetermined question of what degree of confidence ought to be attached to the rumours already afloat, touching the development of the disease, on the island. Mrs. M. was my patient. I do not, however, state the circumstance with any intention of claiming merit to myself for discriminating the real nature of the case: because it was so clear and distinct, that it was impossible to mistake it. Were I to look for any credit in my conduct on this melancholy occasion, my title would rest most properly on the success, which attended the steps I took to silence prejudiced incredulity, at a moment when it had become urgent that the awful truth, in spite of its terrors, should no longer remain concealed. The event gave me no reason to look with sorrow upon the line of conduct I adopted; but, perhaps I may be pardoned for saying, that between the contending motives of discharging an imperious duty, and of sheltering my private and professional character from the odious charge of having, on insufficient grounds, struck a dangerous panic on the public mind, there could be little room left in my own, for agreeable emotions. Never, in truth, had I felt the weight of responsibility, which almost at every step attaches to the medical career, bear so heavily upon me. For, although it was not

probable, still it was by no means impossible, that the case in question might be the only one of a malignant character destined to occur, in the island ; and, moreover, the next might have happened after such an interval of time, as to render it of little or no avail in clearing me from the suspicion of having too hastily, and with considerable injury to the interests of my country, unreservedly expressed so dangerous an opinion. But this was not a time for a prudent suppression of a sad truth. For two or three days, the Central Board of Health, and the public, had been kept in much painful uncertainty, by reason of the conflicting sentiments of medical men on this momentous subject, most of whom had nothing but *de post facto* evidence to guide them in forming their judgments. It must be confessed, that so far as an honest exposition of facts could go, there, certainly, was much that was satisfactory in the statements of the practitioners, whose fears had been awakened by actual observation ; but in a matter of such extreme delicacy, it is hardly astonishing that, with their hearers, caution should have prevailed over every other consideration. The cases of Greenwood and Mrs. Lee, especially, which had turned up on the 6th, were ably discussed in the Board and its Medical Committee ; but here, also, hesitation prevailed,

and the conference only ended in a semi-official declaration, through the local press, that the evidence offered touching certain suspicious cases of disease, did not amount to a proof of the Cholera having actually shewn itself in this community. Such was the unsettled state of things, when, on the 9th, the Board came to the unanimous resolution, that from the evidence of medical men, touching the case of Mrs. Murray, there, unfortunately, could no longer remain any doubt of the existence of Asiatic Cholera, in the island. From this critical moment, the wisdom and devotedness of the members of that body began and continued to be evinced in the unremitted discharge of their various duties, in and out of doors. The promptitude with which the requisite measures were adopted and carried into effect, was truly admirable. No sacrifice of time or feeling appeared too great; no office too troublesome or disgusting; no rivalry existed save in the exertions of each, to contribute the most towards the noble object, public good. In a word, all was activity, zeal and ready cooperation. I need not, therefore, particularize the services of every Gentleman connected with the Board. I would, indeed, feel great and sincere pleasure, in dwelling especially upon the valuable suggestions, and active exertions of one, distinguished by his exalted station, and

by a less intimate connexion with our local interests ; but his honorable claims to our gratitude on this occasion, are too notorious, and too lastingly impressed upon the mind of every Jerseyman, to require the feeble illustration I could give them, in this place.

On the same day (August 9th), a building was offered gratuitously for an Hospital by Edward Nicolle, Esq., in his own name, and in those of his co-proprietors, Messieurs Philip Nicolle and Philip Winter—which humane impulse was immediately met by a corresponding feeling on the part of Mr. Thomas Turner, who, conjointly with Colonel Le Geyt, and Mr. Peter Perrot, undertook to fit up the place with the least delay possible, and by whose extraordinary activity, it was made ready for the reception of patients, by the 12th, at noon. It is no less singular than satisfactory, that a building thus put at the disposal of the Board, to meet a casualty, should have happened to be so susceptible of being quickly adapted to the intended purpose. Its situation on the sea-shore, its spacious and well-perforated rooms, its wide staircase, its isolation from every other edifice, and the space afforded by the ground on which it stands for a convenient inclosure and the erection of supplementary wards, if required—and, also, its proximity to the districts which suf-

ferred the most from the disease—in fact, every thing belonging to it, rendered the loan of it a public benefit, which cannot be estimated too highly.

Although it might have been advantageous in many respects, if all paupers attacked with cholera had been removed to the hospital, where all articles necessary for the prompt application of curative means were concentrated ; still here, as elsewhere, it did not appear in accordance with humanity, to compel the sufferers to leave their dwellings, without a previous consent on their part. It is, indeed, a nice question to determine, whether this respect for individual feeling was of more real benefit, in regard to the preservation of life, than an opposite course would have been. For, if on the one hand, much dangerous excitement and concealment were avoided — on the other, the absence of necessary utensils, blanketting, fuel, &c., &c., in the dwellings of the poor, joined to the unavoidable loss of time incurred in procuring these and the appropriate remedies, too often contributed evidently to place beyond the controul of the healing art, a multitude of cases which might, possibly, have been less inveterate, had circumstances been more favorable. Be that as it may, the number of cases treated in the hospital must be allowed to have been very

small, in proportion to the total number of cases reported—the first being only 284, and the latter 806. Frequently also, it happened that the patient, using his discretion in opposition to the medical attendant's earnest entreaties, the most precious moments were wasted in irresolution; and that, when at length collapse and coma had rendered the unfortunate sufferer indifferent to his own fate, the friends would now press for his admission into the hospital, at such an advanced stage of the malady as precluded all chance of recovery. Many, indeed, were the cases, which, to my certain knowledge, were transferred to the hospital in a moribund state. Moreover, it must be acknowledged, that during the two or three first weeks of the epidemic, the virulency of the seizures can only be conceived by those who actually witnessed them; every case seeming, as it were, intended to verify the discouraging words of Majendie—“ *that it was a disease which began where others end—with death.*” These considerations in great measure account for the frightful mortality, which prevailed in our hospital.

So large a proportion of cases of Cholera, not to speak of other diseases, being treated at the dwellings of the sick, it became necessary to establish a very extensive system of medical service in our town. Accordingly, a practitioner was

attached to each of the twelve districts ; but, subsequently, the arrival of six Surgeons from London, who were originally intended for supplementary duties, in the country parishes, enabled the Board to decline the services of the other Gentlemen, and to institute a Medical Station or Dispensary for attendance on the poor. Upon the merits of this plan, as compared with the other, I would certainly hesitate to offer a decided opinion ; but, of the ostensible motives of the Gentlemen who urged its adoption, I cannot but think very favorably.

The Central Medical Station, as the latter establishment was named, was set up in imitation of similar ones in Paris, where the *premiers secours* were bestowed upon the poor in every species of disease, whether premonitory of Cholera or not—and where the proper means of conveyance to an hospital were constantly kept in readiness, and managed by competent persons. To these duties, in our Station, were superadded those of attending all the pauper-patients of the town, of directing the fumigation of infected houses, and of superintending the burning of such effects as had been condemned. It is obvious that an attempt to render a single establishment sufficient for so great a variety of important purposes, could not otherwise than mar the original design, and thus

make it ultimately less beneficial than it might otherwise have proved, had its sphere of operation been more limited. Nevertheless, much good is stated by many, and may indeed be easily conceived, to have arisen from the powerful moral effect produced by the opening of that institution, on account of its holding out an additional degree of certainty, that prompt assistance, at any hour of the day or night, would be readily obtained for those who might require it. The Gentlemen attached to it as Medical Officers, having no other avocations, and being therefore wholly and solely devoted to its duties, seemed to offer a stronger security in that respect, than could be expected from general practitioners, whose private practice in and out of town could not but interfere, more or less, with the discharge of their duty, in regard to the then principal cause of fear, and anxiety, in the public mind. A positive advantage resulted, however, from the facility of procuring a suitable conveyance to the hospital, cradles well-stocked with covering, and well-manned, being kept at the Station ; whereas, before, they could only be had from the Hospital, and frequently at considerable loss of valuable time.

In the mean time, the epidemy had already spread with frightful rapidity to several parts of the town ; and it is well worthy of remark, that

the disease first broke-out in the very spots, which the District-Committees, after their inspections in the early part of the year, had particularly pointed-out as requiring attention, on account of the insalubrious condition of the dwellings. Greenwood's case occurred in one of the most wretched hovels of Parade-Place—Murray's case, in Hamptonne's-Court, Le Geyt-street, which the President of the 4th district, so early as February, had reported as being at all times excessively filthy, and overcrowded with inhabitants. Respecting Cabot's Yard, in Sand-street, two-thirds of the miserable tenements of which afforded one or more cases of malignant Cholera before the 13th, the President of the 6th District's report of the 11th April, contains the following sensible observations :—" Mr. John Cabot's Yard, at the end of Sand-street, is in a most infectious state. The drain of the yard runs down over the ground, between two rows of dirty low houses, all occupied by persons of the lowest class, and very dirty. This drain empties itself in a large hole at the end of the yard, where it remains stagnant, there being no outlet to the sea, from the new line of Quays having left no drain for the said yard. Besides, the neighbours, and occupiers of the yard throw all their filth on the piece of ground, which is at the end of the yard, and causes a dreadful

“ stench ; which, if not removed by a drain into
 “ the sea, and a covered drain in the yard, will
 “ certainly be the first quarter for Cholera. Sad
 “ complaints, &c. &c.”

It is surely not too much to suppose, that, had the above remarks received the serious attention they deserved, much human life might have been spared. But there is that strange perversity in our nature, that we must actually suffer, before we can be brought to apply the energies of our minds to precautionary measures against an impending calamity. It is even well, if at the dear school of experience, we learn to guard against the future.

The extraordinary severity with which the Cholera visited Cabot's Yard, finds then a ready solution in the insalubrious condition of that receptacle of poverty, and the state of filth and misery, in which its wretched inhabitants had been allowed to remain. Similar observations will apply equally to Hilgrove-Lane, and other places, where also predisposing and exciting causes prevailed abundantly. I will now attempt to support that position, by adducing in further proof of it the effects of a measure, which, in my opinion, reflects the highest honor upon the energy and foresight of its promoters. On the 10th of August, it having been represented that the already

great number of cases, in Cabot's Yard, would inevitably increase, should the many agents of infection existing in it still continue unrestrained; the Board of Health came to the resolution of authorizing the police of St. Helier to surmount the resistance offered by the occupiers of that filthy alley, by compulsory means if necessary, in order to their being conveyed to tents pitched for their accommodation on Gallows' Hill. Here, they were to be provided with wholesome nourishment, and to exchange their rags for good clothing, at the public expense. During their salutary exile, all nuisances were ordered to be removed from the yard; the dwellings to be restored to a salubrious condition; and the dangerous articles of furniture and bedding to be destroyed, and replaced by new ones. This bold measure was forthwith carried into execution, with a result well calculated to repay those, who were engaged in the perilous office, for the trouble they so humanely undertook, and for the unmerited reproaches showered upon them, by the misguided creatures, for whose safety, they were thus endangering their own.

The *encampment*, I believe, is not strictly chargeable with a single case of Cholera:—a circumstance the more gratifying, as the unfortunates to whom it gave refuge were taken from the very

hot-beds of the fatal malady. Many, indeed, who were sent up with premonitory symptoms, speedily recovered their healths, under the salutary influence of pure air, and wholesome diet. In only one or two instances, was it found necessary to remove some of them to the Cholera Hospital; and these were persons, who having taken-in the germs of the disease, gave indications of it almost as soon as they had arrived. So that it may be justly said, that no example of Cholera really took its origin under the tents. This admirable establishment, which consisted of fourteen tents, was open from the 11th August to the 17th September; during which time three hundred persons, chiefly women and children—the destitute survivors of a husband or father—were received, and supplied with whatever their necessitous condition demanded. Due care was taken to distribute them, as much as was found practicable, in families, so as to mitigate the restraint thus imposed upon them for their own and the public security. Such among them as had avocations in town, were, nevertheless, allowed to follow them, and were immediately released, so soon as they had provided themselves with suitable lodgings, and produced a certificate to that effect from the President of the district, in which they purposed taking-up their new abodes. Others, being in perfect health, and having under-

gone the probation of some days' residence under the tents, were sent out of the island. The whole was under the superintendence of Messrs. Philip De Carteret, jun., Tate, and Matthew Le Geyt, who humanely undertook the immense trouble and heavy responsibility, inseparable from such an office, and who discharged the duties of it, with a degree of zeal and unabated perseverance, highly creditable to themselves, and advantageous to the public. In dismissing this interesting part of my subject, I cannot help saying, that there is no act of the Board, which I contemplate with more unmixed gratification than the above measure; and I therefore trust that the details I have entered into respecting it, will find an excuse in its prominence, and its solid advantages.*

With us, Asiatic Cholera does not appear to have observed any rule or consistency in its progress, save that of directing its devastations upon such quarters principally, as contained its kindred agents of predisposition. So far, its known capriciousness in other places was certainly little evinced in our town, which it took, as the French would say, *en masse*. Disregarding, almost enti-

* During the thirty-six days that the encampment was kept up, 1986 daily rations were served out—giving an average of 55 a day. The greatest number of persons succoured at one time in that munificent asylum was 80; but the number continued to vary between 60 and 80 for many days.

rely, its other predilections, it revelled especially among the poor and dissolute, in whatever spots they happened to be congregated. This perhaps too figurative view of the conduct of the pestilence, in its first period amongst us, will, I think, derive some support from the following analysis of the data relating to it, which my office in the Board placed at my disposal.

On the 6th of August, the disease broke-out simultaneously in the *fifth* and *sixth* districts; and on the 8th, in the *fourth*, all three contiguous to one another.

On the 10th, it invaded the *second*, *seventh* and *eleventh* districts.

On the 13th, the *first* and *ninth* districts, which are at two opposite extremities of the parish of St. Helier.

On the 14th, the *tenth* district, adjacent to the *ninth*, furnished a case.

On the 16th, the *twelfth* district shared the same fate; and, lastly,

On the 28th, the *third* district, which is entirely rural, began to send-in cases also.

It ought to be observed, that during the period comprehended between the first, and the last of the above dates, several other parishes had been attacked. On the 18th, the malady had extended to George-Town, and, on the 24th, to Gorey.

Some isolated cases had likewise shewn themselves in other parts of the island, in individuals either eminently predisposed, or who had evidently contracted the infection in the town, or either of the aforementioned villages. In a word, by the 3rd of September, every parish had suffered more or less, with the single exception of St. Mary's, which enjoyed the inestimable privilege of remaining free from the disease, during the whole of its continuance in the island. The town of St. Aubin also escaped entirely ; a circumstance probably less owing to chance, than to advantages of locality, and thinness of population. Besides, the vigilance and exertions of its Committee of *Surveillance* must have had but few obstacles to contend with in that quiet spot, where extreme misery and want are seldom found, its poor being almost exclusively of the description, which is entitled to parochial relief.

As in most places, the calamity consequent upon Cholera was very unequally dispensed among our population. For example, in Saint Helier's, which of itself furnished $\frac{7}{8}$ of the total number of cases, we find that the contiguous districts Nos. 4, 5 and 6, where the disease first pronounced itself, gave one half of those, which occurred in the nine districts included in the town,

properly so called. But in regard to the ratio between the cases and the population, the order of the several districts stood thus, viz.

District No. 6....1 case to every $15\frac{1}{2}$ individuals.

| | | | | |
|---|---------|---|-----------------|---|
| “ | 1....1 | “ | $18\frac{1}{2}$ | “ |
| “ | 5....1 | “ | 19 | “ |
| “ | 7....1 | “ | 23 | “ |
| “ | 4....1 | “ | $30\frac{1}{2}$ | “ |
| “ | 11....1 | “ | 37 | “ |
| “ | 8....1 | “ | $42\frac{1}{2}$ | “ |
| “ | 9....1 | “ | — | “ |

With respect to No. 9, I cannot speak positively, not having the means of ascertaining its population; but, as far as I am able to judge, it appears to me to be entitled to the place I have given it. In the other districts, the proportion is comparatively trifling. At Gorey, in the parish of Grouville, it appears to have reached the frightful degree of *one* case in every *eight* individuals; the population being only 513, and the number of cases reported being 62. This circumstance, however, ceases to appear astonishing, when we consider the unfavorable localities of that village, together with the other peculiarities belonging to it, of a nature to foster a pestilential disorder. By far the most extensive and populous part is built on an extremely flat soil, with little or no inclination, under the level of the beach, and surrounded with marshy land and

meadows, the waters of which, almost every where, stagnate, from the absence of drainage. On a surface of very moderate extent, there are 64 houses, occupied by 108 families, giving a total of 513 inhabitants, one fourth of the population of the whole parish of Grouville. Most of these families are very numerous; the father is commonly not a native, and earns a scanty livelihood by fishing; so that poverty is very general among them. Drunkenness is here also a very prevalent vice. Assuredly, with such elements of predisposition, Gorey could not fail to be severely visited by the disease, once it had developed itself on the island.

The extent to which Asiatic Cholera spread its ravages in this island is truly appalling. By referring to the parish register, I have ascertained that on an average of six years, viz. 1826,—27,—28,—29,—30; and 31—the number of burials, at St. Helier's, for the months of August, September, and October is 111. This year the number, during the same period, reaches 464—giving an excess of 353!* Few places, that I am aware of,

* It is a question with many, whether the usual rate of mortality shall be found to have been much affected by the ravages of Asiatic Cholera, in the several countries which it has visited. I have heard it answered in the negative, by anticipation, by more than one person, in and out of the profession. The time is, however, fast approaching when it may be determined upon incontrovertible data. My own impression has always been

which have hitherto been visited by the pestilence, surpass us in the relative amount of our loss by that ruthless disease. Even Paris, where it was supposed to have raged with unprecedented virulency, falls short of our little town in that particular. There, the excess of mortality reached 19,723, from the 26th of March to the 31st of August—a formidable number, assuredly, when considered singly, and with no reference to population. If, however, we divide the population of that great city by that of our town—say, in round numbers, 900,000 by 16,000—the quotient will be 56 and a fraction; and by afterwards multiplying our excess (353) by that quotient (56), we shall

that, in all probability, the annual mortality would be found to have been increased in a degree very nearly equal to the number of cases of Cholera; because the majority of these occurred in the ages, which, in ordinary times, give the least proportion of deaths. The conclusion deducible from a reference to Bills of Mortality might, however, be fallacious; unless, in many instances, we made the year of observation, in regard to that statistical question, commence at the irruption of the malady, in each place, and end at the corresponding season, the following year. With regard to London, the disease having broke out in the early part of the year, there does not appear so great a necessity for adopting such a method in making the computation. Now it appears that the burials within the “Bills,” in 1832, exceeded those of the preceding year by 3269. The deaths from Cholera are stated to have been 3200. The total number of burials given in the Bills of Mortality, were, in 1831, about 26,000, giving an average of about 500 per week. In 1832, the number was 28,606, being about 550 per week. The general account of burials within the city of London and Bills of Mortality, from December 14th, 1831, to December 11th, 1832, is summed up as follows :

| Buried. | |
|---|--------|
| Males..... | 14,280 |
| Females..... | 14,326 |
| Total..... | 28,606 |
| Increase in the burials reported this year..... | 3,269 |
| N. B. Deaths by Cholera..... | 3,200 |

Vide—*London Medical Gazette*,
Jan. 5th, 1833.

have a product of 19,768. Similar comparisons might be instituted with other places, with a similar result ; but I have given the preference to Paris, because I know that nowhere have either the Bills of Mortality, or the Returns of Cholera cases been kept with greater exactitude than in that Metropolis, so deservedly famed for its police establishments.

The total number of cases reported is 803 ;—that of deaths, 347. The general accuracy of the information received by the Central Board upon that important subject, may be fully relied upon, when it is recollected that the channels by which it arrived were so respectable, and operated so constantly as mutual checks upon each other, that neither misrepresentation, nor concealment, could fail to have been brought to light, had they been attempted. And, since the value of my deductions must depend chiefly upon the authenticity of the data from which they have been drawn, some particulars may be necessary to satisfy the reader, that the system adopted for obtaining full and correct information of the state of public health, was such as not to be easily defeated ; and, consequently, that the facts upon which I reason are deserving of the most implicit confidence. In the first place, all medical practitioners without

exception were required, under very heavy penalties, to send in daily *nominal* returns of the cases which had fallen under their observation, during the preceding twenty-four hours ; with the names of the dead and the recovered inserted numerically in the recapitulation annexed to the return. Mere *numerical* statements were absolutely rejected, as open to serious confusion and abuse ; from the possibility of the same patient being included in more than one return, unknown to the several parties. Besides, so various were the circumstances required to be stated, that no mistake could proceed from the same case being reported by two medical attendants, or by the Hospital Surgeons and a private practitioner, with an accidental difference in the christian name or surname. In the second place, misrepresentation and concealment were equally checked by the domiciliary visits, made daily by the district-committees, whose representatives generally attended at the Board with a written report, which, being laid on the table, was read aloud by the Secretary :—and, in the event of any discrepancy appearing between the latter document and a medical return, an explanation was immediately sought for, and obtained. From such regular and rigid proceedings, truth could not fail to be elicited. Whenever doubts might be entertained touching

the validity of a medical return—(as occurred twice, in the case of an unqualified person, who reported a number of cases, which he denominated Cholera,)—the Board deputed a commission to verify the fact. Moreover, concealment was obviated by admission into the Church being denied to a corpse, unless a medical certificate was produced, asserting that death had not ensued from the epidemical disease. I need say no more to prove the efficacy of the means used to obtain the truth, and *nothing but* the truth.

The foregoing details, relative to the constituency and proceedings of our Board of Health, were deemed worthy of some attention ; inasmuch as they tend, with other circumstances, to prove, that by the effect of strictness and regularity in the mode of ascertaining facts, adopted by our authorities, the history of Cholera in this little island might be made to exhibit as clear and faithful a picture of the destructive malady, as could be drawn from a more extensive range of observation.

In following attentively the epidemy through the different stages of its progress in Jersey, from its commencement to its final disappearance ; and, at the same time, noting the state of the weather ; we cannot but be struck with the apparent influence of meteorological phenomena,

upon the degree of intensity, with which the disease spread its ravages. For nine days previous to the 28th of August, on which the epidemy attained its acme—the new cases in the preceding twenty-four hours having reached the formidable number of 47, with 21 deaths—the weather was uninterruptedly cloudy and wet; and during the same interval, the disease made gradual advances towards that frightful degree of severity. On the 29th, and 30th, the sky continuing cloudy, with high westerly winds and rain, the daily occurrence of cases kept itself up to 23 and 25: after which period, the malady decreased almost regularly from day to day; although Grouville, and some other parishes, began to swell the Official Reports of the Board. Take notice again, that the whole of September was remarkably fine and dry; the column of mercury in the barometer standing higher, than it had done in any preceding season of the year. Whether the curious coincidence I have attempted to point out, between one fact and the other, be deemed of much importance or not, I can, without fear, pledge myself for the accuracy of both. The inference, of course, remains to be proved by corresponding observations elsewhere.*

* The mortality from Cholera, in Vienna, during the first month of its existence—that is to say, from the 13th August to the 13th September, 1831—amounted to no more than 100 deaths. But, about the latter period, a heavy rain and storm having prevailed for the better part of three days, the disease broke-out with the most alarming violence on the night of the 13th

The whole duration of the epidemic extended to eleven weeks and five days. On the 27th of October, was published the cheering resolution of the Central Board, viz.—“ That there being no
 “ existing case of Cholera in the island, at present,
 “ the Board do adjourn, *sine die*, and the publica-
 “ tion of Official Reports be accordingly sus-
 “ pended from this day.” It is remarkable that, at this very time, the terrific disease had just begun its work of destruction in the island of Guernsey. Thus at the long looked-for moment that joy, health, and tranquillity began, once more, to shed their fertilizing influence over this delightful island, our gluttoned enemy was exacting the tribute of disease and death from our affrighted neighbours !

In its ravages the late epidemic appears to have pervaded the whole range of human life, from the tender age of *six weeks* to the advanced period of *ninety-eight years*. Nevertheless, by far the greater number of cases occurred in the ages between *twenty* and *forty* ; more especially in the female sex. For example, out of the total number of cases, viz. 806,—355 are *females*, 317 *males*, and 134 children under *fourteen years*. Out of those respective numbers, we have in the *females*, 201 cases from *twenty* to *forty years*, nearly two thirds ;

—in the *males*, 149, not quite one half. In the children, we have 65 cases under *six years*, and 68 from *six* to *fourteen years*.

The next favourable age seems to have been from *forty* to *sixty years* ; but in that period the male exceed the female cases very considerably,—the former amounting to 109,—the latter to 88 only.

With regard to the comparative mortality in the various ages, a very curious similarity obtains in both sexes.

From *fourteen* to *twenty years*,—in the *males*, 1 death in 3 cases,
in the *females*, 1 death in about $3\frac{1}{2}$.

From *twenty* to *forty years*,—in the *males*, 1 death in $2\frac{1}{2}$,
in the *females*, 1 death in $2\frac{1}{3}$.

From *forty* to *sixty years*,—in the *males*, 1 death in $2\frac{1}{3}$,
in the *females*, 1 death in 2 exactly.

From *sixty* to *eighty years*,—only 5 recoveries in 26 cases
for the *males*, and the same number in 28 cases for the *females*.

From *eighty* to a *hundred years*, all cases were rapidly fatal.

In *children*, the deaths were to the cases, viz.—

Under *six years*, as 1 is to $2\frac{1}{4}$.

From *six* to *fourteen years*, as 1 is to $2\frac{1}{3}$.

There is a circumstance belonging to the history of Asiatic Cholera in the island of Jersey, which

as it seems, at first sight, to militate against a very general notion, many persons may not be prepared to hear without questioning its accuracy. It is the following. Out of 442 individuals attacked with the disease, whose habits were noticed in the returns of medical men, only 140 are marked *intemperate*, whilst the remaining 302 are marked *temperate*. This may appear rather doubtful to those, who,—because the abuse of ardent spirits has been justly signalized by all observers, as being one of the greatest predisposing causes of the direful malady,—have conceived the idea of its being almost the *only* one. But a little reflexion will suffice to show, that the above circumstance does not in reality invalidate the fact of the proneness of drunkards to contract the infection: since, in most instances, they owed their superior degree of liability to that one cause only, whilst all the other causes of predisposition put together—and they are very numerous—produced little more than *double* the effect of that single one. However, in another, and more important point of view; that is, in regard to the comparative fatality of the disorder, in both descriptions of persons,—the same analysis of facts proves, that for every hundred cases of Cholera in the *intemperate*, 63 were fatal; whilst, on the other hand, in the same number occurring in persons of sober

habits, only 30 terminated in death. Now, as nothing is generally more unsuccessful, than an attempt to obviate drunkenness in a community like ours,—where extraordinary temptations, and facilities continually baffle and neutralize the benevolent intentions of the reformer,—it is some consolation to know, that by directing our attention to other predisposing causes of the malady, more easily controuled;—such as, impure air, bad nourishment, filth of every description, fear, insufficient clothing, &c. &c. &c.—we may make ourselves more extensively useful to our fellow-creatures, than might at first be imagined. For my own part, on considering the preventive effects of the *encampment*, I feel not the least hesitation in stating it as my firm conviction, that were we, if again threatened with the like visitation, strictly and perseveringly to apply such sanitary means as are at our disposal, a vast number of individuals of all classes would be effectually protected from its dreadful effects. I am as sincere as any man can be, in hoping that a recurrence of such a calamity may not take place; but, should our hopes be blasted by the event, and our prayers be unheeded by the Almighty, let us at least profit by dearly-purchased experience; and, in taking precautionary steps against the impending scourge, let us chiefly rely for success on the steady appli-

cation of the lesson, which we have already learnt at an expence of so much human life. It is only for the unhappy fatalist to imagine, that, in such dispensations, reason and art, when applied with humility, can be of no avail ; since, on the contrary, man is encouraged by a promise of divine help, not to await danger with supineness, but to rouse and exert himself in his own defence, when an impending evil threatens his well-being.

FINIS.

TABLE shewing the Cases of Asiatic Cholera, which occurred in the Island of Jersey, arranged according to Parishes, Districts, Sexes, and Ages, with a general Recapitulation of the whole.

| PARISHES. | DISTRICTS. | MALES. | | | | | | | | | | FEMALES. | | | | | | | | | | CHILDREN. | | | | RECAPITULATION | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|--------------|---------------|--------------|---------------|-------------------------------|--------|-----|
| | | From 14 to 20 | | From 20 to 40 | | From 40 to 60 | | From 60 to 80 | | From 80 to 100 | | From 14 to 20 | | From 20 to 40 | | From 40 to 60 | | From 60 to 80 | | From 80 to 100 | | Under 6 | | From 6 to 14 | | Cases | Deaths | |
| | | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | No. of Cases | No. of Deaths | | | |
| Saint Helier's..... | First..... | 0 | 0 | 2 | 0 | 9 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 2 | 3 | 2 | 1 | 1 | 0 | 0 | 2 | 0 | 2 | 1 | M 12 3 C 4 1 F 9 5 | 25 | 9 |
| | Second..... | 1 | 0 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | M 8 2 C 3 1 F 4 0 | 15 | 3 |
| | Third..... | 1 | 0 | 3 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | M 5 1 C 2 2 F 1 0 | 8 | 3 |
| | Fourth..... | 3 | 0 | 10 | 2 | 9 | 5 | 1 | 1 | 0 | 0 | 1 | 0 | 11 | 6 | 6 | 5 | 3 | 3 | 0 | 0 | 5 | 3 | 6 | 4 | M 23 8 C 11 7 F 21 14 | 58 | 29 |
| | Fifth..... | 11 | 5 | 31 | 12 | 23 | 12 | 6 | 5 | 1 | 1 | 12 | 8 | 49 | 20 | 22 | 14 | 8 | 8 | 1 | 1 | 19 | 9 | 17 | 7 | M 72 33 C 46 16 F 92 51 | 200 | 102 |
| | Sixth..... | 4 | 1 | 23 | 6 | 15 | 11 | 3 | 3 | 0 | 0 | 4 | 1 | 25 | 10 | 12 | 0 | 4 | 3 | 0 | 0 | 11 | 7 | 8 | 2 | M 15 21 C 19 9 F 45 20 | 169 | 50 |
| | Seventh..... | 1 | 0 | 7 | 4 | 12 | 6 | 2 | 2 | 0 | 0 | 2 | 0 | 11 | 5 | 2 | 0 | 1 | 1 | 0 | 0 | 6 | 4 | 8 | 3 | M 22 12 C 14 7 F 16 0 | 52 | 25 |
| | Eighth..... | 2 | 1 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 11 | 7 | 6 | 4 | 0 | 0 | 1 | 1 | 2 | 1 | 3 | 1 | M 15 5 C 5 2 F 20 12 | 40 | 19 |
| | Ninth..... | 2 | 1 | 14 | 8 | 5 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 16 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 0 | M 21 10 C 9 0 F 23 4 | 53 | 14 |
| | Tenth..... | 0 | 0 | 6 | 2 | 2 | 1 | 3 | 2 | 0 | 0 | 1 | 0 | 9 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | M 11 5 C 1 1 F 13 5 | 25 | 11 |
| | Eleventh..... | 0 | 0 | 14 | 6 | 9 | 4 | 2 | 2 | 0 | 0 | 3 | 0 | 17 | 8 | 17 | 7 | 4 | 3 | 0 | 0 | 4 | 2 | 5 | 4 | M 25 12 C 9 6 F 41 18 | 75 | 36 |
| | Twelfth..... | 2 | 1 | 4 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | M 9 6 C 1 1 F 5 3 | 15 | 10 |
| Total in Saint Helier's..... | | 27 | 9 | 125 | 48 | 90 | 45 | 19 | 17 | 1 | 1 | 30 | 9 | 163 | 67 | 76 | 40 | 22 | 20 | 2 | 2 | 56 | 27 | 58 | 26 | | 675 | 311 |
| Saint Clement's..... | | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | M 2 2 C 0 0 F 1 1 | 3 | 3 |
| Saint Martin's..... | | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | M 1 0 C 5 0 F 4 0 | 10 | 0 |
| Grouville's..... | | 5 | 1 | 11 | 2 | 7 | 1 | 3 | 2 | 0 | 0 | 1 | 0 | 24 | 4 | 5 | 1 | 3 | 1 | 0 | 0 | 9 | 2 | 4 | 3 | M 26 6 C 13 5 F 33 6 | 72 | 17 |
| Saint Saviour's..... | | 0 | 0 | 4 | 3 | 0 | 0 | 2 | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 2 | 2 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | M 6 4 C 2 0 F 12 4 | 20 | 8 |
| Trinity's..... | | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M 2 1 C 0 0 F 3 1 | 5 | 2 |
| Saint John's..... | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M 1 0 C 0 1 F 4 1 | 5 | 1 |
| Saint Mary's..... | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M 0 0 C 0 0 F 0 0 | 0 | 0 |
| Saint Lawrence's..... | | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M 3 1 C 0 0 F 2 0 | 5 | 1 |
| Saint Peter's..... | | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M 4 0 C 0 0 F 1 1 | 5 | 1 |
| Saint Brelade's..... | | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M 1 1 C 0 0 F 2 0 | 3 | 1 |
| Saint Owen's..... | | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | M 3 2 C 0 0 F 0 0 | 3 | 2 |
| Total number throughout the Island.... | | 33 | 11 | 148 | 50 | 108 | 46 | 26 | 21 | 1 | 1 | 36 | 10 | 203 | 73 | 87 | 41 | 28 | 23 | 2 | 2 | 67 | 29 | 67 | 29 | | 896 | 317 |

